

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application:

Listing of Claims:

1. (Currently amended): A method for isolating a ~~polynucleotide~~ nucleic acid encoding an antibody against a lesional tissue, wherein the method comprises the steps of:
 - (a) isolating a single lesional tissue-infiltrating B cell from a lesional tissue by a technique that comprises using laser microdissection (LMD) to excise a region comprising the B cell from a section of the lesional tissue; and
 - (b) obtaining a polynucleotide encoding an antibody heavy chain and a polynucleotide encoding an antibody light chain of the isolated B cell.
2. (Original): The method of claim 1, wherein the lesional tissue is a cancer tissue.
3. (Canceled)
4. (Currently amended): The method of claim 1, wherein step (b) comprises the step of amplifying a ~~gene~~ nucleic acid encoding an antibody variable region.
- 5-8. (Canceled)
9. (Currently amended): A method for producing an antibody, wherein the method comprises the steps of:
 - (a) isolating a single lesional tissue-infiltrating B cell from a lesional tissue by a technique that comprises using LMD to excise a region comprising the B cell from a section of the lesional tissue;

(b) obtaining a polynucleotide encoding an antibody heavy chain and a polynucleotide encoding an antibody light chain of the isolated B cell;

(c) preparing one or more expression vectors comprising the polynucleotides;

(d) transforming a host cell with the one or more expression vectors to obtain a transformed host cell expressing the polynucleotides;

(e) culturing the transformed host cell; and

(f) recovering an antibody expressed by the transformed host cell.

10-11. (Canceled)

12. (Currently amended): The antibody production method of claim 9, wherein the method further comprises the steps of:

(1) contacting the antibody obtained by the method of claim 9 with a test lesional tissue;

(2) detecting binding between the antibody and the test lesional tissue; and

(3) selecting the antibody if it binds to the test lesional tissue.

13-14. (Canceled)

15. (Previously presented): The method of claim 1, wherein the method is repeated for twenty or fewer B cells.

16. (Previously presented): The method of claim 1, wherein the method is repeated for five or fewer B cells.

17. (Previously presented): The method of claim 1, wherein the lesional tissue is removed from a patient by surgical excision.

18. (Previously presented): The method of claim 3, wherein the lesional tissue is frozen.

19. (Previously presented): The method of claim 3, wherein the lesional tissue is fixed.

20. (Previously presented): The method of claim 1, wherein the B cell is a human B cell.

21. (Previously presented): The method of claim 1, further comprising obtaining the sequence of a variable region of the antibody heavy chain or light chain.

22. (Currently amended): The method of claim 1, wherein the lesional tissue is an ~~arteriosclerotic~~ arteriosclerotic lesion.

23. (Previously presented): The method of claim 1, wherein the lesional tissue is an inflammatory disease lesion.

24. (Previously presented): The method of claim 1, wherein the lesional tissue is a lesion generated by an infectious pathogen.

25. (Previously presented): The method of claim 1, wherein the lesional tissue is an autoimmune disease lesion.

26. (Previously presented): The method of claim 1, wherein the lesional tissue is an artificially prepared lesion.

27. (New): The method of claim 2, wherein the cancer tissue is selected from the group consisting of breast, lung, liver, colon, pancreas, prostate, and skin cancer.

28. (New): The method of claim 12, wherein the test lesional tissue is the lesional tissue from which the B cell was isolated.

29. (New): The method of claim 12, wherein the test lesional tissue is from an individual different than the individual from whom the B cell was isolated.

30. (New): A method for isolating nucleic acid encoding an antibody against a lesional tissue, wherein the method comprises:

(a) isolating a single lesional tissue-infiltrating B cell from a lesional tissue by a technique that comprises using LMD to excise a region comprising the B cell from a section of the lesional tissue;

(b) obtaining a first polynucleotide encoding an antibody heavy chain and a second polynucleotide encoding an antibody light chain of the isolated B cell; and

(c) repeating steps (a) and (b) at least once to obtain polynucleotides encoding antibody heavy chains and light chains of at least one more lesional tissue-infiltrating B cell from the lesional tissue.